

WHAT IS CLAIMED IS:

1. In a method for the treatment of emboli or other occlusion in a blood vessel in which the occlusion is crossed by a guidewire, the improvement comprising aspirating while crossing said occlusion.
2. In the method of Claim 1, wherein the improvement comprises aspirating while crossing said occlusion in a proximal to distal direction.
3. A method for the evacuation of an occlusive substance from a blood vessel, comprising:
positioning a distal end of a guidewire proximal to at least a portion of the occlusive substance within said blood vessel;
introducing an aspiration catheter over said guidewire; and
crossing the site of the occlusive substance with the distal end of the guidewire and the aspiration catheter while aspirating.
4. The method of Claim 3, further comprising moving the distal end of the aspiration catheter in a distal to proximal direction following delivery of the guidewire across the site of the occlusive substance.
5. The method of Claim 4, further comprising aspirating while moving the distal end of the aspiration catheter in a distal to proximal direction.
6. The method of Claim 5, further comprising repeating said crossing while aspirating in both a proximal to distal and in a distal to proximal direction.
7. The method of Claim 3, wherein said occlusion is a thrombus or embolus.
8. The method of Claim 3, wherein said guidewire includes an occlusive device at its distal end.
9. The method of Claim 8, wherein said occlusive device is a balloon.
10. The method of Claim 8, further comprising activating said occlusive device to prevent particle migration past said occlusive device.
11. The method of Claim 9, further comprising delivering a therapy catheter to perform therapy on said occlusive substance following activation of said occlusive device.

12. The method of Claim 11, wherein said therapy catheter is selected from the group consisting of an angioplasty balloon catheter, a stent delivery catheter and an atherectomy catheter.

5 13. The method of Claim 3, wherein said blood vessel is a saphenous vein graft.

14. A method for treatment of an occlusion in a totally occluded blood vessel or partially occluded blood vessel defined by thrombolysis in myocardial infarction (TIMI) flow of 0-1, comprising:

10 delivering a guidewire until its distal end is proximal to the occlusion;
delivering an aspiration catheter until a distal end of the aspiration catheter is proximal the occlusion;

simultaneously crossing the site of the occlusion in a proximal to distal direction with said distal end of the guidewire and the distal end of the aspiration catheter while aspirating;

15 moving the distal end of the aspiration catheter back across the site of the occlusion in a distal to proximal direction while aspirating;

exchanging said guidewire for a guidewire having an occlusive device at its distal end; and

20 positioning the occlusive device at a site distal to the occlusion, and activating said occlusive device.

15. The method of Claim 14, further comprising inserting a therapy catheter to perform therapy on said occlusion.

16. The method of Claim 15, further comprising introducing said aspiration catheter to remove debris generated during said therapy.

25 17. The method of Claim 14, wherein said blood vessel is a saphenous vein graft.

18. The method of Claim 14, wherein said occlusion is a thrombus or embolus.

19. The method of Claim 14, wherein said occlusive device is a balloon.

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20. The method of Claim 14, further comprising repeating at least once said crossing while aspirating and moving said aspiration catheter in a distal to proximal direction.

21. A method for treatment of an occlusion in a partially occluded blood vessel, comprising:

delivering a guidewire having an occlusive device at its distal end until the distal end is distal said occlusion;

delivering an aspiration catheter until its distal end is proximal to the occlusion;

activating said occlusive device; and

crossing the site of the occlusion with the distal end of the aspiration catheter while aspirating.

22. The method of Claim 21, further comprising moving the distal end of the aspiration catheter in a distal to proximal direction across the occlusion while aspirating.

23. The method of Claim 21, further comprising inserting a therapy catheter to perform therapy on said occlusion following activation of the occlusive device.

24. The method of Claim 23, further comprising removing the aspiration catheter prior to inserting the therapy catheter.

25. The method of Claim 21, further comprising introducing said aspiration catheter after performing therapy to remove debris generated during said therapy.

26. The method of Claim 21, wherein said blood vessel is a saphenous vein graft.

27. The method of Claim 21, wherein said occlusion is a thrombus or embolus.

28. The method of Claim 21, wherein said occlusive device is a balloon.

29. The method of Claim 22, further comprising repeating at least once said crossing while aspirating and moving said aspiration catheter in a distal to proximal direction.

30. The method of Claim 23, wherein said therapy catheter is selected from the group consisting of an atherectomy catheter, stent and balloon catheter.